REMARKS

This Amendment is being filed in response to the Office Action mailed November 13, 2008, which has been reviewed and carefully considered. Reconsideration and allowance of the present application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-7, 10-17, and 25-28 remain in the Application, where claims 8-9 had been previously canceled without prejudice, claims 18-24 have been currently canceled without prejudice, and claims 25-28 have been currently added. Claims 1, 10 and 17 are independent.

In the Office Action, the Examiner indicated that the information disclosure statement (IDS) filed August 17, 2005 fails to comply with 37 CFR 1.98(a)(2) for not supplying legible copies of a non-patent literature. As correctly noted on page 2 of the Office Action, a legible copy of an article by Miletis entitled "Low-Pressure Ion Nitriding of AISI 304 Austenitic Stainless Steel with an Intensified Glow Discharge" has already been provided. The Office Action recites that a second NPL pertaining to the American Institute of Physics still need to be supplied.

It is respectfully submitted that this 'second NPL' pertaining to the American Institute of Physics is the continuing citation of the Miletis article, and not a separate NPL. The PTO/SB/08B form filed with the IDS on August 17, 2005 lists only two items, numbered 1 and 2. However, the first item listed as number 1, which is the Miletis article, occupies two rows in PTO/SB/08B form (which appears to be causing confusion), but is not two separate listings. Rather, the first two rows in the PTO/SB/08B form filed with the IDS on August 17, 2005 refer to a single NPL, namely, the Miletis article. As the Miletis article has already been consider, there is no further NPL to be considered.

In the Office Action, the Examiner objected to claim 7 for a certain informality. In response, claim 7 has been amended to remove the informality noted by the Examiner. Accordingly, withdrawal of the objection to claim 7 is respectfully requested.

In the Office Action, the Examiner provisionally rejected claims 17-18 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over a copending Application No. 10/522,287. This rejection is also respectfully traversed particularly in view of the present amendment to claim

17. However, it is respectfully submitted that Applicants will consider filing a terminal disclaimer, if necessary in view of any allowable claims, upon indication that the present application is otherwise allowable or includes allowable claims.

In the Office Action, claims 17-18 and 22-24 are rejected under 35 U.S.C. §112, first paragraph. This rejection is respectfully traversed. However, to advance prosecution, the rejected claims 18 and 22-24 have been canceled without prejudice, and claim 17 has been amended for better clarity and conformance with the specification. It is respectfully submitted that this rejection of claims 17-18 and 22-24 has been overcome. Accordingly, withdrawal of this rejection is respectfully requested.

In the Office Action, claims 1, 4-7, 10, 13-14, 16 and 19-21 are rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,354,008 (Domoto) in view of JP 60-162766 (Oiwa) and U.S. Patent No. 5,953,969 (Rosenhan). Further, claims 2-3 and 11-12 are rejected under 35 U.S.C. §103(a) unpatentable over Domoto in view of U.S. Patent No. 5,857,260 (Yamada). Claim 15 is rejected under 35 U.S.C. §103(a) over Domoto in view of U.S. Patent No. 6,584,691

(Gerasimov). Claims 17-18 and 22-24 are rejected under 35 U.S.C. §103(a) over Domoto in view of U.S. Patent No. 4,259,126 (Cole). It is respectfully submitted that claims 1-7, 10-17, and 25-28 are patentable over Domoto, Oiwa, Rosenhan, Yamada, Gerasimov and Cole for at least the following reasons.

Domoto is directed to a sliding member having a sliding surface 2 for sliding contact with a cooperative member. A protective film 5b is deposited not only on the sliding surface 2 but also on a surface region immediately adjacent the sliding surface 2. As correctly noted on page 6 of the Final Office Action, last full paragraph, Domoto does not disclose or suggest plasma nitriding all surfaces of the cutting element to form a surface top layer of steel supersaturated with nitrogen and a diffusion layer adjoining the top layer. Oiwa is cited in an attempt to remedy the deficiencies in Domoto.

Oiwa is directed to an electric razor where a dense nitride film is formed on the surface of the outer blade to improve the durability and to reduce a sliding load. The outer blade is made of Ni or stainless steel and the dense nitride film is formed on the surface of the outer blade by plasma nitriding.

Rosenhan is directed to screwdriver bit where its surface is hardened due to nitrating, and has softer region of a core. As clearly shown in FIG 2, the hardness decreases away from the center to reach a plateau near the center.

It is respectfully submitted that Domoto, Oiwa, Rosenhan, and combination thereof, do not teach or suggest the present invention as recited in independent claim 1, and similarly recited in independent claims 7, 10 and 17 which, amongst other patentable features, recites (illustrative emphasis provided):

> wherein the cutting element is hardened simultaneously by precipitationally hardening the stainless steel with the plasma nitriding on all surfaces of the cutting element to form a surface top layer of steel supersaturated with nitrogen and a diffusion layer adjoining the top layer with a hardness ranging from the hardness of the top layer to the hardness of the steel before hardening so that the top layer has a substantially uniform hardness and the diffusion layer has a **continuously** decreasing hardness with depth of the diffusion layer, the **continuously** decreasing hardness of the diffusion layer **continuously** decreasing from outer portions of the diffusion layer toward a center of the diffusion layer and meeting at the center of the diffusion layer to form a **minimum peak** at the center, wherein a hardness at the center of the diffusion layer is an original hardness the stainless steel.

Simultaneously hardened cutting element by precipitationally hardening with the plasma nitriding on all surfaces of the cutting element, e.g., at the same temperature (claim 17) to form a top layer supersaturated with nitrogen having a substantially uniform, and diffusion layer having a continuously decreasing hardness, where the continuously decreasing hardness of the diffusion layer continuously decreases from outer portions of the diffusion layer toward a center of the diffusion layer and meeting at the center of the diffusion layer **to form a minimum peak at the center**, is nowhere disclosed or suggested in Domoto Oiwa, and Rosenhan, alone or in combination. Rather, Rosenhan shows in FIG 2 that the hardness decreases away from the center to reach a **plateau** near the center. Yamada, Gerasimov and Cole are cited to allegedly show other features and do not remedy the deficiencies in Domoto, Oiwa and Rosenhan.

Accordingly, it is respectfully submitted that independent claims 1, 7, 10 and 17 should be allowable. In additions, claims 2-7, 11-16, and 25-28 should be allowable at least based on their dependence from independent claims 1, 7, 10 and 17.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

In view of the above, it is respectfully submitted that the present application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

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